

508012/11/05

Revised

CITY OF RIVERSIDE
HUMAN RESOURCES DEPARTMENT
CLASSIFICATION SPECIFICATION

TITLE: UTILITIES SENIOR SUBSTATION/GENERATION TEST TECHNICIAN

DEFINITION

Under general supervision, to perform skilled technical and supervisory work in the testing, repair and calibration of protective relays and systems, load control telemetering and supervisory controls and electrical substation equipment or electrical generation equipment including rotating machinery, instrumentation, continuous emissions monitoring systems and supervisory control systems; and to do related work as required.

REPORTS TO: Utilities Electric Operations Manager

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from the Utilities Electric Operations Manager. Exercises supervision over the Utilities Substation Test Technicians or Utility Generation Test Technicians, para-professional and technical staff as assigned.

EXAMPLES OF DUTIES

Typical duties may include, but are not limited to, the following:

- Prepare work reports and maintain records.
- Assist in budget preparation and administration.

In addition, when assigned to Substation:

- Supervise and participate in the testing, repair and calibration of protective relays and systems, control circuits, power transformers, telemetering, load and supervisory controls.
- Supervise and participate in the troubleshooting of circuit breakers, transformers, motors and other malfunctioning substation equipment.
- Supervise and participate in the use of high voltage dielectric testing of cabling, buswork, apparatus and vehicles.
- Supervise, train and evaluate technical subordinates.

In addition, when assigned to Generation:

- Monitor and perform testing, repair and calibration of electric, pneumatic and mechanical instrumentation and control systems.
- Monitor and perform troubleshooting of motors, generators, transformers and other malfunctioning generation equipment.
- Monitor and perform maintenance of continuous emissions monitoring systems, programmable logic controllers, control systems and other generation equipment.
- Operate and assist with maintenance of all generation equipment as needed.

QUALIFICATIONS

Knowledge of:

- Occupational hazards and standard safety precautions necessary in the work.
- Principles and practices of supervision and training.

In addition, when assigned to Generation:

- Methods, materials and tools used to test, calibrate and repair various instrumentation, control systems, motors, generators and related equipment including knowledge of electric circuits, wiring diagrams and programmable logic controller.
- Principles and practices of power generation equipment, rotating machinery and process systems and ability to apply this knowledge to specific work problems.

In addition, when assigned to Substation:

- Principles and practices of protective relays and related equipment and ability to apply this knowledge to specific work problems.
- Methods, materials and tools used in the testing and repair of air and oil circuit breakers, voltage regulators, transformers and related equipment including a knowledge of electric circuits and wiring systems.

Ability to:

- Understand and carry out complex oral and written instructions.
- Read and interpret wiring diagrams and schematics.
- Develop test programs, procedures and equipment.
- Successfully formulate and execute test procedures that insure the proper functioning of equipment and safeguard the public from power interruptions.
- Maintain records and prepare reports.
- Use and care for hand tools and testing equipment.
- Work overtime as required.

In addition, when assigned to Generation:

- Prepare and assist supervisor with written and oral reports related to routine and regulatory operations.
- Assume responsibility for the proper operation of control systems, instrumentation, analyzers, metering, electrical equipment and sensors.
- Work rotating shifts as required.

In addition, when assigned to Substation:

- Assume responsibility for the proper operation of protective relays, substation switching control devices, metering and telemetering equipment.
- Locate, correct and adjust defects in electrical substation protective and control systems.
- Supervise, train and evaluate subordinates.

Education and Experience:

Any combination of experience and education that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Education: Equivalent to completion of twelfth grade.

Experience: Three years experience in specialized and technical testing and repair of electric substation equipment. Three years of experience in specialized and technical testing and repair of electric, electronic and control of power generation equipment required to work in the Generation group.

MEDICAL CATEGORY: Group 2

NECESSARY SPECIAL REQUIREMENT

Possession of an appropriate, valid class "C" California Motor Vehicle Operator's License.

CAREER ADVANCEMENT OPPORTUNITIES

FROM: Senior Substation Test Technician

TO: Electric Operations Manager or Power Generation Manager